

III. Remarks

**A. Response to Rejection of Claims 14, 16–17,
19, 21–23, 26, 28 and 31–32 under 35 U.S.C. § 103**

Claims 14, 16–18, 19, 21–23, 26, 28 and 31–32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 5,843,193 to Hawkins et al. ("the Hawkins patent"), in view of United States Patent No. 5,494,489 to Akram et al. ("the Akram patent").

1. Examiner's reasons for the rejection

The Examiner's reasons for the rejection are as follows:

Hawkins (US' 193) teaches a hair dyeing composition comprising cationic conditioning agent of quaternary ammonium salts and quaternary derivatives of cellulose ethers such as polyquaternium 10 as claimed in claims 14, 17 and 19 (see col. 9, lines 50–67 and col. 10, lines 56–60), wherein the cationic conditioning polymers are presented in the amounts of 0.05 to 10% which covered the claimed percentage range as claimed in claims 21–22 (see col. 9, lines 46–49), dye precursors as claimed in claims 14 and 23 (primary intermediates) (see col. 2, lines 17–67), anionic tensides (anionic surfactants) as claimed in claim 16 (see col. 7, line 9). Hawkins also teaches a method for dyeing hair comprising applying to the hair the dyeing composition as described above, wherein the method is similar to the claimed method as claimed in claims 28 and 32 (see col. 14, lines 1–23).

The instant claims differ from the reference by reciting a composition comprising a quaternary ammonium phospholipids compounds (surfactants) of the claimed formula (I) in which R represents the claimed formula (II).

However, the primary reference teaches a dyeing composition comprising different surfactants (tensides) (see col. 6, lines 25–28).

Akram (US '489) in analogous art of hair dyeing formulation, teaches a composition comprising tris(3-N,N-dimethyl-N-linolenamidopropyl-2-hydroxyammoniumpropyl) phosphoric acid ester-trichloride (Phospholipids EFA) (described in U.S. Pat. No. 4,209,449 incorporated herein by reference, whereas the reference's compound may be represented by a formula similar [to] the claimed formula (I), when in the claimed formula (I), Y is 0, A is oxy-2-hydroxyprop (-O-CH₂-CHOH-CH₂-) and R³ is monounsaturated C₈ to C₁₈ acyl radical and when in the reference the compound of tris(3-N,N-dimethyl-N-linolenamidopropyl-2-hydroxyammoniumpropyl)phosphoric acid ester-trichloride (Phospholipids EFA) represents 2-hydroxypropyl radical attached from one side to a quaternary ammonium radical carrying two methyl radicals and a tertiary amine radical having monounsaturated C₁₈ acyl radical to form a linolenamide group and attached from [the] other side to a phosphoric radical which represents the claimed compound linoleamidopropyl PH-Dimonium chloride phosphate (Phospholipids EFA) as claimed in claims 14, 26 and 31 (see col. 3, lines 61–64).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of the primary reference by incorporating the tris(3-N,N-dimethyl-N-linoleneamidopropyl-2-hydroxyammoniumpropyl) phosphoric acid ester-trichloride (Phospholipids EFA) as taught by Akram to make such a composition with a reasonable expectation of success. Such modification would be obvious because the primary reference suggests the use of surfactants (tensides) in the dyeing composition (see col. 6, lines 25–28) and the secondary reference teaches clearly that the use of Phospholipids compounds in the hair colorant composition succeeds in achieving an improvement in the area of wet-combing behavior by 48[▲] (see col. 4, lines 48–53), and, thus, a person of ordinary skill in the art would be motivated to incorporate the phospholipids compounds as taught by Akram et al. (US '489) in the hair dyeing composition of Hawkins et al. (US '193) with a reasonable expectation of success for improving the wet-combing behavior of the hair and would expect such a composition to have similar properties to those claimed, absent unexpected results.

(Examiner's Action, Paragraph 4, page 2, line 18 to page 4, line 14).

2. A preponderance of the evidence as a whole does not support a *prima facie* case of obviousness of the claims over the combination of the Hawkins and Akram patents

Section 2142 of the Manual of Patent Examining Procedure sets forth the following standards for establishing a *prima facie* case of obviousness:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *in re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 – 2143.03 for decisions pertinent to each of these criteria.

If the examiner determines there is factual support for rejecting the claimed invention under 35 U.S.C. 103, the examiner must then consider any evidence supporting the patentability of the claimed invention, such as any evidence in the specification or any other evidence submitted by the applicant. The ultimate determination of patentability is based on the entire record, by a preponderance of

evidence, with due consideration to the persuasiveness of any arguments and any secondary evidence. *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). The legal standard of "a preponderance of evidence" requires the evidence to be more convincing than the evidence which is offered in opposition to it. With regard to rejections under 35 U.S.C. 103, the examiner must provide evidence which as a whole shows that the legal determination sought to be proved (*i.e.*, the reference teachings establish a *prima facie* case of obviousness) is more probable than not.

a. The Declaration of Dr. Mustafa Akram provides evidence in support of patentability

Applicants submit herewith the Declaration of Dr. Mustafa Akram (attached as EXHIBIT

A). The Declaration of Dr. Akram is being submitted in accordance with 37 C.F.R. § 1.132.

(i) No motivation to combine references

Dr. Akram addresses the Hawkins and Akram patents at Paragraphs 6–8 of his Declaration as follows:

¶6. The Hawkins patent is directed to a composition and method for oxidative dyeing of hair and to a kit containing the hair dyeing composition and a developer. The composition comprises (by weight of the total composition): 0.0001 to 20% of at least one primary intermediate and at least one coupler for the formation of oxidation dyes, 0.01 to 10% of a 2-hydroxyphenyl benzotriazole compound which absorbs ultraviolet radiation in the wave-length range of 200 to 400 nanometers, 0.5 to 20% surfactant, and 10 to 65% water.

¶7. The Hawkins patent does not exemplify, disclose or even suggest component (a) of Applicants' composition as claimed in claim 14 of at least one tenside of formula (I). The Hawkins patent also does not disclose as an essential ingredient, component (b) of Applicants' claimed composition of "at least one conditioning component comprising a cationic polymer." The Hawkins patent suggests that a cationic conditioning agent is one of a number of other ingredients that may be added to the compositions of the Hawkins invention (Column 9, lines 46–47).

¶8. The Akram patent discloses that improved wet combability of hair is achieved by aqueous colorants for keratin fibers such as human hair. The aqueous dyeing composition is based on oxidation dye precursors, which are mixed immediately before application with a peroxide-containing composition to form a hair care composition. The hair care composition also comprises at least one developer substance, at least one coupler substance and tris (3-N,N-dimethyl-N-linolenamidopropyl-2-hydroxyammoniumpropyl) phosphoric acid ester-trichloride (hereinafter referred to as the tenside of formula (I)). The Akram patent does not disclose, exemplify or even suggest Applicants' composition as claimed in claim 14, comprising (b) at least one conditioning component comprising a cationic polymer.

As set forth in the Declaration, Hawkins does not disclose as an essential ingredient, component (b) of Applicants' claimed composition of "at least one conditioning component comprising a cationic polymer." Hawkins and Akram also have different objectives. Hawkins is concerned with solving the problem of ultraviolet radiation of hair dyes. Akram provides no disclosure as to that problem. Instead, Akram is concerned with wet combability and grip of hair being dyed and damage to hair during the hair dyeing process.

Given these differences, persons of ordinary skill in the art having the Hawkins and Akram patents would not select from Hawkins one of several optional ingredients for combination with an ingredient from the Akram composition. By the same reasoning, persons of ordinary skill in the art would not modify the Akram composition to include an optional ingredient in Hawkins.

Applicants' reasoning is supported by the guidelines as to motivation that are set forth in the Manual of Patent Examining Procedure. Section 2143.01 of the Manual of Patent Examining Procedure sets forth the following standard for finding a suggestion or motivation to modify the references:

"There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet*, 149 F.3d 1350, 1357 47 USPQ2d 1453, 1457–58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obvious[ness] was held improper.). The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VASI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999).

Here, Hawkins and Akram solve different problems and do not teach the benefit of combining any optional ingredient in Hawkins with an ingredient in Akram. The level of skill in the art cannot be relied on to provide the suggestion to combine references. *Al-Site Corp. v. VASI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999).

b. Objective evidence of secondary considerations

Under Section 2141 of the Manual of Patent Examining Procedure:

Objective evidence or secondary considerations such as unexpected results, commercial success, long-felt need, failure of others, copying by others, licensing, and skepticism of experts are relevant to the issue of obviousness and must be considered in every case in which they are present. When evidence of any of these secondary considerations is submitted, the examiner must evaluate the evidence. The weight to be accorded to the evidence depends on the individual factual circumstances of each case. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 USPQ 81 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987).

(i) Unexpected results

The Declaration of Dr. Mustafa Akram describes at Paragraph 14 a comparison carried out between a composition comprising (A) a tenside of a formula (I) as disclosed in the Akram patent (comparative composition A), a composition comprising (B) at least one conditioning component comprising a cationic polymer as disclosed in the Hawkins patent (comparative composition B) and Applicants' claimed composition (inventive composition C). The results of the tests carried out with compositions A, B and C are disclosed in Paragraph 15 of the Declaration of Dr. Mustafa Akram and are discussed in Paragraphs 16 and 17 of the Declaration. In summary, hair treated with inventive composition C had superior results relative to hair treated with composition A in all respects, that is, combability of wet and dry hair and grip of wet and dry hair. Hair treated with inventive composition C relative to hair treated with composition B had superior results in terms of combability of dry hair and grip of wet and dry hair, and equal results in terms of combability of wet hair. The combability results indicate that hair treated with inventive composition C suffered less damage. The superior grip results of hair treated with inventive composition C indicate that it is easier to handle and style the hair. (Akram Declaration, Paragraphs 18–19).

(ii) Commercial success

Because of the unexpectedly good results in terms of hair care with the composition claimed in the Akram application, Henkel KGaA, the Assignee of the Akram patent and the Akram application changed the Igora Royal brand of hair colorant from the composition claimed in the Akram patent to a composition claimed in the Akram application in the year 1999. Sales

figures of the “Igor Royal brand product” from 1998–2002 show a substantial and continuing increase after relaunch of the Igor Royal brand hair coloring product in 2000–2002, compared with 1998 (the brand last full year before relaunch). (Akram Declaration, Paragraph 20).

c. **The Hawkins and Akram patents are in conflict**

As set forth in the Declaration of Dr. Mustafa Akram, the Hawkins patent suggests that a cationic conditioning agent is one of a number of ingredients that may be added to the compositions of the Hawkins invention (Akram Declaration, Paragraph 7). The Akram patent identifies the formula (I) compound as ineffective as a separate conditioning agent. (See the disclosure at column 4, lines 40–59, which discloses that after-treatment of hair with a formula (I) compound produced no improvement in the wet combability of hair. (Akram Declaration, Paragraph 21).

According to Section 2143.01 of the Manual of Patent Examining Procedure:

Where the teachings of two or more prior art references conflict, the examiner must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another. *In re Young*, 927 F.2d 588, 18 USPQ2d 1089 (Fed. Cir. 1991). . . .

Akram’s disclosure that the formula (I) compound is ineffective as a separate conditioning agent discredits the use of that compound as a conditioning agent in the Hawkins composition and supports the subsequent conclusion of Dr. Akram that, “the disclosures in the Hawkins and Akram patents do not suggest Applicants’ claimed composition and method and do not provide motivation or guidance to obtain Applicants’ claimed composition and method.” (Akram Declaration, Paragraph 21).

Accordingly, for the reasons set forth above, the preponderance of evidence relating to the patentability of the claims does not support a *prima facie* case of obviousness of claims 14, 16–17, 19, 21–23, 26, 28 and 31–32 under 35 U.S.C. § 103(a) as being unpatentable over Hawkins in view of Akram. Accordingly, the rejection is untenable and should be withdrawn.

C. Response to Rejection of Claims 20, 24, 25 and 27 under 35 U.S.C. § 103(a)

Claims 20 and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hawkins in view of Akram, and further in view of United States Patent No. 5,993,491 to Lim et al. ("the Lim patent").

Claims 24 and 25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hawkins in view of Akram, and further in view of United States Patent No. 5,580,357 to Cotteret et al. ("the Cotteret patent").

The Lim and Cotteret patents do not disclose Applicants' claimed composition "for coloring keratin fibers comprising (a) at least one tenside of formula (I)" and "(b) at least one conditioning component comprising a cationic polymer."

The Lim patent is directed to compositions and methods for the oxidative coloring of human hair, wherein the compositions contain as a novel primary dye intermediate a 1-(4-aminophenyl)-2-pyrrolidinemethanol, or a cosmetically acceptable salt thereof. The Cotteret patent discloses a dyeing composition for keratinous fibers, comprising in a suitable dyeing medium, at least one oxidation dye precursor chosen from certain defined aminophenols and at least one coupling agent chosen from certain 2-methyl-5-aminophenols. Neither the Lim nor Cotteret patent discloses Applicants' claimed composition (for coloring keratin fibers comprising (a) of at least one tenside of formula (I) and (b) at least one conditioning component comprising a cationic polymer. (Akram Declaration, Paragraph 22).

Accordingly, for the reasons set forth above, the rejection of claims 20 and 27 under 35 U.S.C. § 103(a) as being unpatentable over Hawkins in view of Akram, and further in view of Lim, and the rejection of claims 24 and 25 under 35 U.S.C. § 103(a) as being unpatentable over Hawkins in view of Akram, and further in view of Cotteret, are untenable and should be withdrawn.

Response To Office Action
of August 4, 2006

PATENT
Application No. 09/937,912
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Examiner Eisa B. Elhilo
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IV. Conclusion

It is believed that the above Remarks constitute a complete Response under 37 C.F.R. Section 1.111 and that all grounds for objection stated in the Action have been adequately rebutted or overcome. Applicants ask for reconsideration and allowance of all pending claims. A Notice of Allowance in the next Action is therefore requested. The Examiner is requested to telephone the undersigned counsel if any matter that can be expected to be resolved in a telephone interview is believed to impede the allowance of the pending claims of Application No. 09/937,912.

Respectfully submitted,

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